Best Available Copy

The state of the s REQUEST FOR ACCESS OF ABANDONED APPLICATION UNDER 37 CFR 1.14(a) RECEIVED APR 1 6 2001 File Information Unit Papar No. A Assistant Commissioner for Patents. Washington, DC 20231 I hereby request access under 37 CFR 1.14(a)(3)(Iv) to the application rile record of the above-Identified ABANDONED application, which is: (CHECK ONE; (B) referred to in an application that is open to public inspection as set form in 37 CFR 1.11, i.e., on page _____ of ____ fflea _____ Application No. __ paper number __ (C) an application that claims the cenefit of the filling cate of an application that is open to public inspection, i.e., Application No. _ (D) an application in which the applicant has filed an authorization to say open the complete application to the public. Please direct any correspondence concerning this request to the following address:

VIOLENDA POINCARREL

Typed or printed name

FOR PTO USE ONLY

(Initials)

Approved by: __

Unit:

Burden Hour Statement: This form is estimated to take U.2 hours to complete. This will vary depending upon the needs of the individual rate. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Fraderiers Office, Washington, DC 20221. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Assistant Commissioner for Patents, Washington, DC 20221.

United States Patent [19]

Pauley et al.

[11] Patent Number:

4,952,913

[45] Date of Patent:

Aug. 28, 1990

[54] TAG FOR USE WITH PERSONNLL MONITORING SYSTEM

[75] Inventors: James D. Pauley, Estes Park; Allen E. Ripingill, Jr., Louisville, both of

Colo.

[73] Assignee: B. I. Incorporated, Boulder, Colo.

[21] Appl. No.: 446,212

[22] Filed: Dec. 4, 1989

Related U.S. Application Data

[63] Continuation of Ser. No. 231,823, Aug. 12, 1988, Pat. No. 4,885,571, which is a continuation of Ser. No. 852,831, Apr. 15, 1986, abandoned.

| Dil | Int. CL ² , | 1/34 HU4B 1/34 |
|------|------------------------|-------------------------|
| 1521 | U.S. Cl | 340/573; 340/514; |
| • • | | 340/825.49; 455/100 |
| [58] | Field of Search | |
| • • | . 340/514-51 | 6, 539, 825.49; 455/100 |

[56] References Cited

U.S. PATENT DOCUMENTS

| 3,478,344 | 11/1969 | Schwitzgebel | 340/312 |
|-----------|---------|---------------|-----------|
| 3,882,277 | 5/1975 | | 179/2 DP |
| 3,898,984 | 8/1975 | Mandel | 128/2.1 A |
| 4,259,665 | 3/1981 | Manning | 340/575 |
| 4,285,146 | 5/1981 | Charles et al | 40/21 C |
| 4,378,539 | 5/1986 | Townsing | 379/97 |
| 4,598,275 | 7/1986 | | 340/573 |
| 4,622,344 | 11/1986 | Bially et al | 340/573 X |
| 4,665,387 | 5/1987 | Cooper et al | 340/572 |
| 4,682,155 | 7/1987 | Shirley | 340/573 |
| 4,747,120 | 5/1988 | | 379/38 |
| 4,885,571 | 12/1989 | | 340/573 |

FOREIGN PATENT DOCUMENTS

2141006A 12/1984 United Kingdom .

OTHER PUBLICATIONS

A. K. Schmidt, "Electronic Monitoring Equipment", NIJ Reports, Feb. 28, 1986.

"Judge Orders House Arrest"; LA Times; 11 Sep. 1985; Part 1, p. 3.

"State to Test Electronic Home Jail"; Albuquerque Journal; 9 Mar. 1983; pp. A-1, A-3.

"Electronic Handcuff Keeps Tabs . . "; The Cregonian; 10 Mar. 1983; p. B-12.

"Computer-Age Ball & Chain"; Arizona Republic; 13 Mar. 1983.

"Electronic Handcuffs . . . "; Houston Chronical; 11 Mar. 1983.

"Eig Brother... Test Program"; Albuquerque Tribune; 9 Mar. 1983; p. A -3.

(List continued on next page.)

Primary Examiner—Joseph A. Orsino
Assistant Examiner—Thomas J. Mullen, Jr.
Attorney, Agent, or Firm · Fitch, Even, Tabin &
Flannery

[57] ABSTRACT

A tag for use with an individual monitoring system. The tag is worn by an individual being monitored, preferably on the ankle or leg where it can be concealed by the clothing of the individual. The tag is fully self contained and sealed. The circuits of the tag periodically generate an identification signal that includes an identification code. The identification signal modulates a stable RF signal that is transmitted in bursts of data words to a receiver associated with a field monitoring device (FMD) located at the monitoring location. In turn, the FMD may randomly establish communication with a central processing unit (CPU) located at a central monitoring location. Other information is included in the identification code of the tag, such as information indicating that an attempt has been made to remove the tag from the individual. The tag is held in place near the skin of it's wearer by a conductive strap that wraps around the leg or other liph of the individual. Two capacitive electrodes, one of which is realized with the conductive strap, function as the plates of a capacitor, with the body flesh serving as the dielectric material therebetween. By monitoring an alternating signal coupled from one capacitive electrode to the other, a determination can be made as to whether the tag has remained near the body flesh. Further, because the strap is conductive, a signal can be passed therethrough and a determination can be made as to whether the strap has been broken.

11 Claims, 6 Drawing Sheets

